

# THE GULL



GOLDEN GATE AUDUBON SOCIETY NEWSLETTER

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## Restoring a Lost Watershed

CALIFORNIA  
ACADEMY OF SCIENCES

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**I** imagine you are monitoring the wildlife of a particular site. You've observed over 200 species of birds, mammals, reptiles and butterflies, including thousands of waterfowl and hundreds of shorebirds at a time, three species of snakes (including the beautiful Ring-necked Snake), and Alligator and Western Fence Lizards. You are surrounded by open water, tidal marshes and coastal upland habitat. It's a wildlife paradise. Where are you?

Would you believe you are within the boundaries of the second-densest city in the United States?

San Francisco's Yosemite Creek watershed is located in the Bayview-Hunters Point area of the city. It is bounded by, and includes, the southern shoreline of the Hunters Point Naval Shipyard, the adjoining Candlestick Point State Recreation Area, and all of the Bay waters between these two points—known as the South Basin. The uplands that drain into this part of the Bay, including McLaren Park, are also part of the watershed.

Two-and-a-half years ago, Golden Gate Audubon became part of an exciting project to restore the Yosemite Creek watershed. This is the story of how the watershed, as well as the surrounding community, has deteriorated over many years

and of how a unique coalition of environmental groups and the community is now working together to bring the community's natural resources back to life.

Bayview-Hunters Point is an area of great contradictions. It has the highest concentration of home ownership in San Francisco and the highest unemployment rate. It includes the only State Recreation Area in the city and the only Naval shipyard. It has spectacular views and natural resources and also the highest asthma rates in the city and is the center of many other diseases. It has the largest concentration of



Wetlands and waters of the South Basin with Hunters Point in the distance.

LOST WATERSHED, continued on page 4

## Condors Return to the Pinnacles

**I**n 1890, the noted California ornithologist J.G. Cooper wrote about the California Condor as a "doomed bird." Common along the coast when Europeans arrived, condors became targets for anyone carrying a rifle and victims of poison applied to carcasses in order to kill grizzly bears. In 1941, in the journal *The Condor*, Harry Harris wrote that the condor "is on the very threshold of extinction." At that time, the legendary biologist Carl Koford was undertaking his classic study of the surviving condors in the Sespe area of the Los Padres National Forest north of Los Angeles.

Inspired by Koford, Golden Gate Audubon joined several other local Audubon chapters, the Sierra Club, Friends of the Earth and several prominent and respected conservation activists some 20 years ago to protest National Audubon and U.S. Fish and Wildlife Service plans to capture and radio-tag several of the California Condors remaining in the wild and to create a captive flock in southern California zoos. Better that the species disappear into extinction with dignity than to survive as a captive remnant.

The situation was becoming critical. Of 23 condors in the wild in 1982, four died in 1982–83, and four more in 1983–84. Mortality of five of the remaining 15 birds over the winter of 1984–85 disrupted four of the five breeding pairs.

Such a high rate of deaths of a bird that may live 40 or more years indicated an unusual mortality factor. Recovery of four carcasses, in part

CONDORS, continued on page 5

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# Returning Least Terns Find Expanded Home at Alameda Wildlife Refuge

**I**n late April and May, when a colony of California Least Terns completed its arduous, roughly 2,700-mile trip from Latin America to nest at the Alameda Wildlife Refuge, a pleasant surprise awaited them. They found their old nesting site had nearly doubled in size to over nine acres! The birds also found their nesting area lined with a new, oyster shell ground-cover for camouflage and the entire area protected by a specially designed, rabbit-proof fence. Such a welcome home for the endangered terns is due to the dedicated efforts of Golden Gate Audubon's Friends of Alameda Wildlife Refuge (FAWR) and to U.S. Fish and Wildlife Service (FWS) biologists. The terns also have to thank a class of 50 children from West End Alameda elementary schools, who spent a day in March spreading new oyster shell ground cover for the birds' benefit.

Successful breeding and higher numbers of terns nesting in Alameda over the last 20 years appeared to be causing density bickering. Chicks would sometimes wander into other terns' territory and get hammered with a pointy beak. More than 300 nests seemed to be too many in less than six acres.

Led by biologists Chris Bandy and Rachel Hurt, FWS found the means to expand the colony. The U.S. Navy still owns the land that has been proposed for the Alameda Wildlife Refuge, but the tern colony and the area's wildlife resources are managed by FWS. After initial delays in the project—such as the difficulty in finding contractors willing to install a new fence with recycled materials—the nesting-site expansion was completed just in time, and last-minute details were finished before the terns' arrival. The new fencing is designed to keep jack rabbits out of the colony. New fence poles are cut lower than the top of the fence to remove larger avian predator perches. The old fence (installed in the 1980s) was not entirely chick-friendly. The new fence offers a gentle barrier between the nest site and the outside world with a smooth plastic

mesh border placed along the inside bottom of the chain link fencing.

The new ground substrate is a coarse, heavy sand from Angel Island. A load of oyster shell was brought in and added for chick shelters and predator distraction. And a new cinder-block grid system has been installed for keeping track of nest locations.

While so much habitat has been reduced or lost altogether for so many birds, Golden

Gate Audubon and its tireless volunteers are proud to have an enlarged and safer habitat for these remarkable little terns. It will be interesting to see where they settle. Will they use the new area for nesting or prefer their old, familiar grounds? Come and see for yourself on the "Return of the Terns Day" on Sunday, June 13th.

by Leora Feeney, Chair  
Friends of the Alameda Wildlife Refuge



*California Least Tern*

U.S. Fish and Wildlife Service

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## Unique Chance to See Nesting Least Terns

Don't miss an opportunity to view nesting California Least Terns at the Alameda Wildlife Refuge on Sunday, June 13th, during the "Return of the Terns Festival." The event, which is hosted by the East Bay Regional Park District, runs from 11 a.m. to 2 p.m.

The festival will be held in front of the Crab Cove Visitor Center in Alameda, which is adjacent to Robert W. Crown Marine Conservation Area and Crown Beach picnic areas and lawn. Activities will include mudflat/rocky shore walks, crafts, games and a bus tour to the Alameda Wildlife Refuge to view the nesting Terns.

The trip costs \$3 per person and will last about an hour. A wildlife biologist will be onboard the bus to interpret bird behavior. Visitors will stay on the bus, so no walking is required. Friends of Alameda Wildlife Refuge (FAWR) will have an exhibit table at the festival.

contaminated and Superfund sites in the city (including the closed Naval shipyard). It is the site of nearly all of San Francisco's least desirable industries, from polluters such as power generating plants to auto-wrecking yards to the Southeast Sewage Treatment Plant that treats most of San Francisco's sewage. When heavy rains flush raw sewage into the Bay due to the city's inadequate water treatment system, much of the sewage flows out through six discharge pipes into the Yosemite Watershed's South Basin.

If ever a community and associated watershed were a dumping ground for the City's most undesirable industries and garbage, Bayview-Hunters Point is it. An area with such pressing needs is defined as an "environmental justice community."

The history of this environmental justice community dates back more than six decades. The Bayview-Hunters Point community became predominantly African-American during World War II, when restrictions on African-Americans serving in the military created an abundance of available labor for industrial defense facilities. Between 1938 and 1944, the U.S. Navy actively recruited African-Americans to work at the Hunters Point Naval Shipyard, and new housing was built to accommodate them.

When the war ended and soldiers returned from overseas, African-American workers found themselves forced out of jobs. By 1962, most of those employed at the Hunters Point Shipyard had lost their jobs. As the city grew, its support industries were pushed away from downtown

and into the politically weak Bayview-Hunters Point community. Cattle and pigs were once herded down Third Street, and part of Bayview-Hunters Point was called Butchertown. Power plants and other polluting industries, such as metal plating plants, followed.

The physical changes to Bayview-Hunters Point reflect its social history. In 1898, much of the area was either open water or tidal marsh. Yosemite Creek flowed down from the hill now called McLaren Park and emptied into the Bay in a large marsh that is now Candlestick Point State Recreation Area. By 1919, part of the Bay north of the shipyard had been filled in for development. In 1939, major land filling started at Hunters Point to create the Naval Shipyard. This continued until 1968 when the present fill was completed, including land now occupied by 3Com Park (formerly Candlestick Park).

The tidal marshes surrounding Yosemite Creek disappeared, as did the creek itself. All that remains of the creek is a tidal channel surrounded by urbanized uses. The channel is now part of the Candlestick Point State Recreation Area, as is the long stretch of shoreline running south from the shipyard, along with a few small wetlands and acres of adjacent uplands.

But today, a number of events have coalesced to provide an unprecedented opportunity to restore the long-lost watershed. Following the closure of the Naval shipyard, long overdue environmental justice issues in the Bayview community were recognized. Wetland restoration was proposed at the Candlestick Recreation Area, and a unique coalition of organizations applied for

and won a major grant from CalFed—a joint state and federal agency. The coalition consists of five environmental groups—Golden Gate Audubon, Alliance for a Clean Water Front, Arc Ecology, Clean Water Fund, and Literacy for Environmental Justice—plus the University of San Francisco and the Bayview-Hunters Point Community Advocates.

The purpose of the current restoration project is to address and correct water quality problems in the Bayview-Hunters Point community. A Watershed Council has been established, made up of community residents and representatives of the participating organizations. Our task is to investigate the watershed and identify elements that degrade the environment as well as existing natural resources. From this baseline, the Watershed Council will prepare a plan that will provide solutions to water quality problems in the community and offer proposals to restore or enhance existing natural resources.

Golden Gate Audubon has been involved in the Candlestick Point State Recreation Area for many years. In the 1980s, we strongly supported adoption of the area's General Plan, which included creating new wetlands adjacent to Yosemite Creek and a nature interpretive center. More recently, we helped direct San Francisco International Airport mitigation money toward funding the creation of a new wetland at Candlestick Recreation Area, which currently is in final planning and permitting stages.

The Yosemite Creek watershed project is giving us a chance to become involved in an important environmental justice issue in a neglected part of San Francisco and to introduce Golden Gate Audubon to residents of the Bayview-Hunters Point community, with the goal of creating a long-lasting relationship that can benefit us all.

Look for more details about the Yosemite Creek project in the September *Gull*. We'll describe the wildlife we've discovered through our watershed wildlife census, the high school youths who joined us in wildlife census taking, and the future of renewed natural resources this neighborhood expects to enjoy. We'll also explain how you can help this ground-breaking project continue.

by Arthur Feinstein, Director of Conservation

## Donations

Thank you for your generous donations to support our many conservation, education and member activities!

### Golden Eagle (\$1000 or more)

Anonymous (*Gateway*)

### Peregrine Falcon (\$500 to \$999)

John Matzger (*Australia Trip*)

### Least Tern (\$200 to \$499)

Freda White\*

### Clapper Rail (\$100 to \$199)

Phil Cotty\*, William D. Grasse

### Gifts (to \$199)

Anonymous (2) (*FAWR*), Kenneth Alborn\*, Andrea & Michael Cassidy\*, Mark Eaton, Dave Fafarman\*, Lewis Feldman, Virginia Hammel\*, Bonnie J. Killip, G. M. Kimurafong, Dr. Jessica Krakow, Joyce Larrick (*FAWR*), Patricia Mann\*, Hilary H. McClure\*, Eileen Odegard\*, Laurinda Quong\*, Heather Rosmarin, John V. Sudall\*, Claire Terry\*, Rachel Watson-Clark\*, Nancy & Len Weiss\*

### In memory of

Martha Jane Ericson: *Dan & Joan Murphy*

Jeanette Huddleston: *Susan Cross*

Albie Ulsky: *Linda & John Bowers*

### In-Kind

Karen Klempka & Michael McClure: *Birding Book*

\* With GGAS Supporting Membership

made possible by radio-tagging, provided the critical clue. Lead poisoning from ingestion of ammunition fragments in animals shot by hunters had killed three of the birds and could therefore account for the high rate of mortality documented throughout the previous 40 years. With this discovery, arguments over how to conserve these raptors acquired an entirely different perspective. Condors were not disappearing because of the loss of wilderness; they were being poisoned by a distinctly human activity.

In a program managed by the U.S. Fish & Wildlife Service, all of the birds remaining in the wild were then brought into captivity at the Los Angeles Zoo and the San Diego Wild Animal Park. The program has since been successful in producing young birds beyond the most optimistic expectations. The total population on April 1, 2004, was 218 birds, with a total of 94 in the wild in California, Baja California and Arizona. The number has since increased by three, with the hatching of eggs of three pairs nesting this year in the Sespe area. One of the parents is AC9, Adult Condor # 9, the last of the original condors in the wild who was captured on Easter Sunday 1987 and released back into the wild May 1, 2002. A continuity of the original population has been established.

After several years of reintroducing bald eagles to Central California, the Ventana Wilderness Society joined the program and began to release young condors into the Big Sur area in 1996 and to the Pinnacles in late 2003, the site of the most northerly of the known condor breeding areas. One



Male condor #100, father in 2002 of first condor chick hatched in the wild in 18 years. Missing and presumed dead in September 2002.

bird, however, is now in "condor jail," for being too friendly towards humans, a trait definitely to be discouraged.

The condor recovery program continues to be controversial. To reduce the possibilities of lead poisoning, carcasses of still-born dairy calves are available at all times. But the hardest question remains unanswered: Why attempt to reintroduce birds into an environment where the cause of their original near-extinction is still present? The program, however, has produced a vast quantity of valuable knowledge. Keeping an adult bird with the young birds to be released has reduced a pattern of unacceptable behavior that plagued the earlier years of the program. Also encouraging is that all-copper bullets

are now on the market and bullets containing tungsten but no lead are being developed. Political priorities now include the replacement of lead-containing ammunition at least throughout the condor range.

With more than a little trepidation, I succumbed to the persuasive charms of our Field Trips Coordinator and agreed to lead a Golden Gate Audubon trip to the Pinnacles area over the weekend of April 16-18. Fortunately Hans and Pam Peeters, friends of many years, took over responsibilities for identifying the other birds and the plants. Condors tend to spend much of the day perching, so the chances of finding them are always small. But trip participants were not disappointed come late afternoon. Soaring over the campground area just outside the eastern boundary of the Monument, three birds on Saturday afternoon provided a spectacular display of flying abilities. No flapping of the wings, only an occasional flick of the tail.

The condor is a relic of the Pleistocene that coexisted with mastodons and sabre-toothed tigers. But the Pleistocene was only 10,000 years ago. Peregrine falcons and bald eagles were also around. No reason why such a magnificent bird should be allowed to become extinct in the wild.

by Robert Risebrough, Chair, Latin America Committee; Member, California Condor Recovery

## Notes on Seeing Condors at Pinnacles

If you plan to visit the Pinnacles to look for condors and will be staying overnight at the campground, try setting up comfortable chairs in the mid-afternoon in an area where the ridge to the south is clearly visible. If not staying at the campground, go to the overflow parking lot between the campground entrance and the Monument entrance on the south side of the road. It belongs to the campground and does have a "no trespassing" sign, but the owner assured me that it is fully open to the public. Camping reservations can be made online at [www.pinnacamp.com](http://www.pinnacamp.com) or by writing to: Pinnacles Campground, Inc., 2400 Highway 146, Paicines, CA 95043. — Robert Risebrough

### For More Information

**Fish and Wildlife Service:** [www.hoppermountain.fws.gov](http://www.hoppermountain.fws.gov)

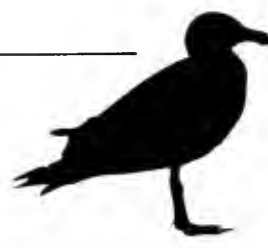
**Ventana Wilderness Society:** [www.ventanaws.org/condors.htm](http://www.ventanaws.org/condors.htm)

**Pinnacles National Monument:** [www.nps.gov/pinn](http://www.nps.gov/pinn)



# FIELD TRIPS

Susan Groves



## Yosemite's Bird Life

*Yosemite National Park*

**Friday–Sunday, June 4–6**

Leaders: Dave Quady, 510.704.9353,  
DaveQuady@worldnet.att.net,  
and Bob Lewis

For details on this 3-day trip, see *March Gull*  
online at [www.goldengateaudubon.org](http://www.goldengateaudubon.org).  
[\$]

## Strybing Arboretum

*San Francisco*

**Sunday, June 6**

GGAS co-leaders: Allan Ridley, Rick Ferrick;  
Strybing Arboretum Docents: Linda Lyons,  
Helen McKenna. 415.566.3241

Meet at 8 a.m. at the front gate of the  
Arboretum. See *January Gull* online for  
details. This regular first Sunday of the  
month half-day trip will not meet in July and  
August but will begin again in September.  
Beginners and all others welcome.

## Monterey Seabirds Pelagic Trips

*Monterey County*

**Sundays, June 13 and July 11**

All-day trips, 7:30 a.m.–3:00 p.m., are  
offered by Monterey Seabirds with a \$10  
discount for GGAS members. For informa-  
tion see [www.montereyseabirds.com](http://www.montereyseabirds.com).

## Aquatic Park

*San Francisco*

**Sunday, June 13**

Leader: SF Maritime National Historical  
Park Ranger Carol Kiser  
415.561.7100 or 561.7104

Meet at 9:30 a.m. at the foot of the Hyde  
Street Pier (Hyde & Jefferson) for this begin-  
ners bird walk. Discover birds next door to  
the urban environment. Approximately two  
hours in length. Dress in layers. Trip is  
wheelchair accessible.

## Sunol Regional Park

*Southern Alameda County*

**Sunday, June 20**

Leader: Bruce Mast, 510.271.4785,  
510.435.1371(cell), Bmast@alumni.rice.edu

We may see Lark and Rufous-crowned  
Sparrows, Golden Eagles, Bullock's Orioles  
plus resident birds of the area. Bring lunch.  
Meet at 8:30 a.m. at the ranger station parking lot  
inside the park near the green barn. Take Hwy. 680  
south, about 8 miles beyond the intersection of Hwy.  
580. Exit at Calaveras Rd., go left (South) and follow  
the signs to Sunol Regional Park, about 5 miles.

[\$] 

## Lassen Volcanic National Park

*Shasta/Lassen Counties*

**Friday–Sunday, June 25–27**

Leaders: Dan and Joan Murphy  
murphsf@comcast.net (e-mail preferred),  
415.564.0074

Join the Murphys on the annual Golden Gate  
Audubon family camping excursion. In past  
years we have seen Willow, Hammond's and  
Dusky Flycatchers, Black Swift, Bald Eagle,  
Osprey, Townsend's Solitaire, Mountain  
Bluebird, Calliope Hummingbird, Black-  
backed Woodpecker, Williamson's Sapsucker  
and most of the warblers and finches that  
breed in the mountains.

**Friday and Saturday Mornings.** We will  
meet at 6:30 a.m. at the Manzanita Lake  
Campground store. We will bird around  
the lake for 2–3 hours, return to camp for  
breakfast, then rendezvous at the store at  
10:30 a.m. for another outing.

**Friday.** Leisurely hike of about 3 mi. on  
a beautiful Lassen trail. We may climb as  
much as 700'. Wear sturdy shoes and bring  
lunch and liquids. Sunscreen, a hat, mos-  
quito repellent and warm clothing may also  
be necessary.

**Sunday.** Drive through the park, making  
frequent stops for birding. We usually stop  
birding and head for home or camp after  
lunch at Summit Lake Campground.

**Saturday.** Campers will meet by the  
camp store at 7:30 a.m. and caravan north  
to Burney Falls, Fall River Valley and Baum  
Lake. Those staying at the Hat Creek  
Resort can meet us at around 8 a.m. at the  
Vista Point about 12 miles north of Lassen  
on Hwys. 44 & 89. Bring lunch and liquids.  
This all day excursion of about 100 mi. will  
include a 2–3 hr. midday break for swim-  
ming at Lake Britton, hiking the trails or  
enjoying a spectacular waterfall. Since this  
is a long and tiring day we suggest a get-  
together for dinner at a nearby restaurant.

**Special Preview.** Friday night join us at  
7 p.m. to watch the night wildlife at the Hat  
Lake beaver pond. From Manzanita Lake  
drive south into the park for about 12 miles.  
Park in the lot to the left just beyond the  
hairpin turn at Hat Lake. Bring mosquito  
repellent, a warm jacket and a flashlight.

Stop at our campsite for further informa-  
tion. We will have a campfire every evening  
at 8 or 9. Check the campground bulletin  
boards or the office at Hat Creek Resort for  
our poster, campsite number, and any last  
minute schedule changes.

From the Bay Area drive north on I-5 to its junction  
with Hwy. 44 in Redding. Go east on Hwy. 44 to the  
northwest entrance of Lassen. Camping facilities  
are available at Manzanita Lake. Lodging is available  
about 15 mi. north of the park at Hat Creek Resort,  
Old Station 530.335.7121. Other information can be  
obtained from the park headquarters, Mineral, CA  
96063.


[\$] 



Contact Susan Groves, Field Trips Committee Chair,  
at 510.654.5954 or [susangroves@att.net](mailto:susangroves@att.net):

- if you can share a ride or if you need a ride,
- if you have difficulty reaching a leader and  
need information,
- if you have suggestions for trips, or
- if you are interested in leading a trip.

## key

 **Carpool**

[\$] **Entrance fee  
required**

 **Biking trip**

## **Chick Banding; California Gull Research**

*Mono Lake*

**Friday–Sunday, July 2–5**

Leaders: Justin Hite, Point Reyes Bird  
Observatory Conservation Science

Join a research team directed by PRBO  
Conservation Science and Cornell University  
in collecting data on the California Gull  
rookery at Mono Lake. Gain hands-on experi-  
ence in field survey techniques. No research  
experience required. Fee charged. Call  
Mono Lake Committee at 760.647.6595 to  
register. Info at [www.monolake.org](http://www.monolake.org).  
[\$]

## **Valle Vista Staging Area, Moraga** *Contra Costa County*

**Sunday, July 11**

Leader: Bob Power, 510.482.9601

Valle Vista has riparian, chaparral, grass-  
land, oak, and pine habitats and is a treat  
to bird when nesting and fledging is in full  
swing.

**Early Bird Special.** Owling: Joaquin  
Miller Park to EBMUD's Valle Vista Staging  
area 4:30 a.m. to 6:30 a.m. Flycatchers, vir-  
eos, and raptors: Valle Vista Staging Area 7  
to 11 a.m.

We'll start at the entrance to Joaquin  
Miller and stop at various pullouts along  
Redwood, Pinhurst, and Canyon Roads to  
see if there are more than just Great Horned  
Owls out there. We'll go to Valle Vista for  
the dawn chorale and look for Western  
Bluebirds, Hutton's Vireos, 5 Woodpecker  
species, and various raptors. Beginners  
and late-risers welcome. We'll be birding  
the parking area from 7–8 a.m. Bring extra  
water, hat, and sunscreen.

Joaquin Miller Park, Oakland. Hwy. 13 to Joaquin  
Miller Rd. exit east or uphill. One half mile, entrance  
on the left. Meet adjacent to the park gate. Valle  
Vista Hwy 24 east to Moraga Way exit, Orinda. Turn  
right on Moraga Way. 5 miles to Moraga Rd./Canyon  
Road turn right. Take Canyon Road approximately 2  
miles to the staging area entrance on your left.

## **Yosemite Alpine Ecology** **Saturday–Sunday, July 31–August 1**

Leader: George Peyton  
510.433.2609 (leave message)

Snow conditions at the time of this writ-  
ing make selection of any specific location  
for this year's outing impossible. However,  
expect a full day's hike in the high country  
on Saturday, and a shorter hike on Sunday,  
returning to our cars at about 3 p.m. Trip  
is by reservation only, and the number of  
participants is limited. This is not primar-  
ily a birding trip, but will emphasize general  
Alpine ecology. All participants should be  
in good physical condition, with reasonable  
experience in hiking and climbing at eleva-  
tions of 8,000 to 11,000 feet. Bring lunch,  
ample fluids, hat, water-repellent jacket,  
sunscreen, mosquito repellent, and good  
walking shoes or boots with treaded soles  
(no smooth soled tennis or other shoes,  
please). We may be traversing snow fields  
after the heavy winter snows in the Sierra.

Make camping or lodging arrangements  
early. County and Forest Service camp-  
grounds are located between Tioga Pass  
and Lee Vining off Hwy. 120 (4–6 mi.  
west of Hwy. 395), as well as Tuolumne  
Meadows Campground in Yosemite. Motels  
in Lee Vining: Best Western Lakeview  
Lodge (760.647.6543), Gateway Motel  
(760.647.6767), and Murphy's Motel  
(760.647.6316). For trip reservations and  
meeting details call leader.

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## **Tufted Puffins and Farallon Islands**

*Pelagic Trip*

**Sunday, August 8**

Leader: Alan Hopkins, 415.664.0983

Golden Gate Audubon and Shearwater  
Journeys are offering a trip to view the  
Farallon Islands. Special GGAS members  
price \$94 (non-refundable).

Depart at 7:30 a.m. from Sausalito  
aboard the Salty Lady for an 8-hour adven-  
ture to the islands and beyond. The Farallon  
Islands are home to nearly 200,000 nest-  
ing seabirds. We will look over colonies  
of Common Murre, Pigeon Guillemot,  
Brandt's Cormorant and watch for Tufted  
Puffin. We will also watch for California  
Sea Lions, Harbor Seals, Elephant Seals  
and Steller's Sea Lions. Weather permit-  
ting, we will head west to the edge of the

Continental Shelf to search for deep water  
seabirds. On previous Farallon trips we have  
seen albatross, fulmars, shearwaters, petrel  
and even whales, porpoises and dolphins.

Send a check for \$94 for each participant  
noting that you are a GGAS member.  
Also include phone number and e-mail  
address (if available) for each member of  
your party and a self-addressed stamped  
envelope to: Shearwater Journeys, P.O. Box  
190, Hollister, CA 95024.

Due to greatly fluctuating fuel prices, a  
\$5 to \$10 fuel surcharge may be necessary  
on the day of the trip.

## **Abbott's Lagoon at Point Reyes** *Marin County*

**Saturday, August 21**

Leader: Bob Lewis  
510.845.5001, [Rlewis0727@aol.com](mailto:Rlewis0727@aol.com)

We will look for Baird's and Pectoral  
Sandpipers and other migrant shorebirds.  
After a walk to the lagoon, we may visit  
other areas of Pt. Reyes.

From Olema or Pt. Reyes Station, take Sir Francis  
Drake Blvd. through Inverness. Turn right on Pierce  
Point Road and go past Tomales Bay State Park.  
Abbott's Lagoon parking lot is on the left, about 4  
miles after the state park. Meet there at 9 a.m. Be  
sure to bring water, a hat and sunscreen.

## **Backpacking Trip in Lassen Volcanic National Park**

*Shasta/Lassen Counties*

**Friday–Monday, August 27–30**

Leaders: David Rice, 510.527.7210  
[rice2@comcast.net](mailto:rice2@comcast.net) and  
Robin Pulich

We will backpack in 3 miles to Snag Lake  
and spend 3 nights in primitive camping by  
a stream near a large meadow. We should  
see flocks of mixed warblers and other song-  
birds that summer in Lassen, plus resident  
birds of the mountains, Bald Eagles, and  
perhaps some migrating shorebirds. We will  
be above 6,000 ft. elevation in beautiful  
country! To avoid impact on fragile habitat,  
this trip is limited to 12 people. Everyone  
will be responsible for his/her own gear and  
food, although some cooperative or shared  
meals may be arranged.

# OBSERVATIONS

April 1–30, 2004  
Bruce Mast



**I**n April, the woods were alive with birds and birders. Migrants of various species continued moving through the region and plenty of trip reports listed first-of-season sightings. Adding to the cacophony, many of the early nesters were already fledging their first chicks. The month produced few truly rare sightings—only two CBRC review species. But never fear: June is just around the corner.

## Loons to Ducks

The Baywaters off Crissy Field, SF, remained a reliable location for Red-necked Grebe through mid-April (FC, DM, JC). On the 28th, Red-necked Grebes in two breeding plumages were ID'd at Tomales Bay, MRN (JC). Sharing the waters at Tomales that day was a **Brown Booby** (*Sula leucogaster*), seen from a boat at the mouth of the Bay. The bird was last seen flying toward Dillon Beach and was not reported again (JC). A few migrating Brants were noted along the coast, but observers more often remarked on their absence.

An April 3rd sighting of a Blue-winged-Cinnamon Teal hybrid at PRNS, MRN, continued a remarkable string of 3 hybrid teal in 4 weeks for the observer (RS). Elsewhere in the duck world, a pair of Redheads plied the waters of Huichica Cr Unit of the NAP-SON Marshes Wildlife Area, SON, on the 3rd (DB, PB) and White Slough Pond, near Vallejo, SOL, on the 16th (RM). The Coyote Pt (SM) Harlequin Duck was last reported on April 4th (BST). The Harlequin was joined that day by a Long-tailed Duck (RST). Another Long-tailed visited Princeton Harbor, SM, April 7–12 (JW; mob) and a 3rd Long-tailed remained at the Fish Docks, PRNS, MRN, throughout the month (mob).

## Raptors to Alcids

On Apr 29th, a juvenile Broad-winged Hawk flew over Corte Madera, adding another tick to the observer's yard list (NW). In the

South Bay, 2 Swainson's Hawks contributed to a 160-species big day in SCL on the 17th (MRo, mob). Just east of San José, Mountain Quail were heard calling on the 12th from the upper east-facing slopes of Black Mountain., SCL (GH). In SF, a Common Moorhen explored the submerged willows beneath a L Merced bridge on the 13th (DM).

A Snowy Plover was located on April 27th near Vallejo, SOL (RM). Four Solitary Sandpipers passed through this month: on the 9th at Jewel L in Tilden RP, CC (KL, KB); April 21–24 at the Oakmont Sewage Pond in Santa Rosa, SON (TMC; mob); on the 19th at end of Allison Drive in Vacaville, SOL; (RM); and on the 27th near Leisure



Red-necked Grebe

Town Rd, also in Vacaville (GD). An April 18th Albany Adult School field trip to Hayward Shoreline had splendid views of at least 400 Red Knots, most of them in stunning breeding plumage (RSc). Knots were also sighted at Bodega Bay, SON, on the 21st (LH); near Vallejo, SOL, on the 27th (RM, RL); and on Ocean Beach, SF on the 29th (ASH). Mountain View Shoreline, SCL, hosted a Semipalmated Sandpiper on the 28th (SR). The Alviso, SCL, salt marshes remained the preferred hang-out for 2 Ruffs through the 17th (mob). Migrating Red-necked Phalaropes in full breeding plumage were reported the last half of the month from several Bayside and Coastal locales.

On April 16th, an adult Franklin's Gull dropped in at White Slough Pond, near

Vallejo, SOL (RM). Ten days earlier, a **Black-headed Gull** (*Larus ridibundus*) was a one-day wonder near CCFS, SCL (BRe, FV; MRo). A faded first-year Glaucous Gull remained at Venice SB, SM, through the 10th (RST; DB, PB, DSi). Spotted from Battery Crosby, SF, a Black-legged Kittiwake joined thousands of gulls, cormorants, and terns swarming the GG channel on the 20th (JC). Starting April 15th, Elegant Terns were reported from Coyote Pt Marina, SM (RST); the old Berkeley Pier, ALA (Matt Ricketts); and near Crissy Fields, SF (HC). Elegants normally don't make it to the Bay before mid-June. Black Skimmer flocks were located twice near their usual haunts at Charleston Slough and Mountain View Shoreline, SCL (BB, NS). Single birds made it up to Coyote Pt Marina, SM, (RST) and MLK Jr. Shoreline, ALA (CP).

## Doves to Thrashers

The Barred Owl at Muir Woods, MRN, was again heard but not seen on the 24th (ASH, MWE). Also in the heard-only department, Common Poorwills were calling at 3 locations: Tilden RP, CC, on the 10th (BoB, BaB); Monte Bello OSP, SCL, on the 17th (MRo, mob); and Quicksilver CP, SCL, on the 25th (GW, RP, JaP, AV). Vaux's Swifts trickled through the last 3 weeks of the month, passing both Bayside and along the interior ridges. The big migratory push came on April 19–22, when multiple observers reported flocks numbering in the 40s. On April 25th, 2 male Black-chinned Hummingbirds were discovered at Piper Slough, CC, which is now closed to public access (NC). The same day, a Costa's Hummingbird entertained birders at Calero CP, SCL (JaP; GW, RP, AV). Calliope Hummingbirds were reported twice from CC: on the 17th at Pine Cyn, Mt Diablo SP (HH; mob); and on the 19th in Baypoint (NC). Rufous Hummingbirds continued their passage through the region, with sightings as late as the 19th.

Visitors to San Antonio Valley, SCL, confirmed that the area is still Lewis's Woodpecker country, but elsewhere the only report was the continuing Lewis's in Inverness, MRN, last documented on the 5th (RS). Hammond's Flycatchers showed a distinct preference for Mitchell Cyn, Mt.



Diablo SP (CC), where up to 11 were found April 19–26 (RS; mob). Starting April 10th, Hammond's were sighted at several higher elevation locations in SME, SCL, and ALA (RST; MRo; MM, MaM). SF was host to a Gray Flycatcher, spotted in GGP on the 26th (BF). Cassin's Kingbirds made stop overs at 3 locations April 9–16 at China Basin, SF (JC); Joseph Grant CP, SCL (MD, mob), and Coyote Pt, SM (RST). A couple Purple Martins flew over Coyote Pt on the 7th (RST) and by the 26th at least 10 had returned to Olema Marsh, PRNS, MRN, where they have nested in past years (RS). A solo Bank Swallow joined a mixed swallow flock over Rodeo Lagoon, MRN, on the 3rd (WL). Small (1994) reports that Bank Swallow colonies in CA have declined dramatically due to riverbank stabilization projects. The hills surrounding SJ, SCL, yielded three American Dipper sightings, including 1 pair nesting upstream from Almaden Res (mob). An April 14th migration watch from atop Mt Davidson, SF, yielded the call of a Varied Thrush (DA). Along with a Dipper, Alum Rock Park, SCL, provided satisfying views of a Townsend's Solitaire on the 4th (AE).

## Wood Warblers to Finches

An April 18th Oakland Bird Club field trip up Mines Rd, ALA, found a Phainopepla near the corrals at MP 17.2 (mob). Sage Sparrows returned to their chaparral haunts near the South Gate to Mt. Diablo SP, CC, where a SCVAS Sparrows class field trip found them on the 3rd (LC; mob). In SCL, nesting Sage Sparrows were found in San Antonio Valley on the 24th (DWe) and singing birds were at Henry Coe SP on the 30th (FV, BRe). An adult male Lapland Longspur in breeding plumage generated excitement for visitors to the summit of Sierra Rd, east of San José, SCL, where it first turned up on the 17th and continued through the 23rd (MRo, mob).

An early returning Blue Grosbeak was first heard on the 3rd, giving its "chink, chink, chink" call along Patterson Pass, ALA. It was seen and heard sporadically throughout the month. (RC; AC, MaM). Elsewhere, Blue Grosbeaks were ID'd at Huckleberry Preserve, CC, on the 8th (DV); Lagoon L, near Vacaville, SOL, on the 19th (JWh); at the SCL WPCP, also on the 19th (MRo);

## Wood Warbler Sightings

### Nashville Warbler

4/16–24	Smiths Cr, SCL	BB, mob
4/19	Coyote Pt, SM	RST, AE
4/20	Presidio, SF	JC
4/21	Joseph Grant CP	MRo
4/24	East Wash, Lincoln Park, SF	HC
4/25	Belmont, SM	RST
4/25	Mitchell Cyn, Diablo SP, CC	BEM Mt

### Northern Parula

4/22	Bolinas Lagoon, MRN	JC
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### Black-throated Gray Warbler

4/8	Skyline OSP, SM	RST
4/12	Black Mountain, SCL	GH
4/16–23	Coyote Pt, SM	RST
4/16–25	Smiths Cr., SCL	mob
4/17	Monte Bello OSP, SCL	MRo, mob
4/18	Los Trancos OSP, SCL	GH
4/19, 20	Glen Cyn Park, SF	MB; BF
4/24	Byrne Preserve, Los Altos Hills, SCL	GH
4/24	Mitchell Cyn, Mt. Diablo SP, CC	BEM
4/25	Hicks Rd, SCL	GW, RP, JaP, AV
4/26	East Wash, SF	HC
4/30	Henry Coe SP, SCL	FV, BRe

### Hermit Warbler

4/17	Monte Bello OSP, SCL	MRo, mob
4/22	Inverness Ridge, PRNS, MRN	JC
4/22–24	Smith Cr, SCL	LM, LC, DWe

4/23	Hidden Villa, SCL	GH
4/24, 25	Mitchell Cyn, Mt. Diablo SP, CC	BEM, mob
4/26	Año Nuevo SP, SM	GH

### Hermit x Townsend's Warbler

4/26	Mitchell Cyn, Mt. Diablo SP, CC	RS
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### Palm Warbler

4/14–18	Glen Cyn Park, SF	DA
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### Black-and-white Warbler

4/25	Pacifica, SM	anon, RST
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### Northern Waterthrush

4/3, 17	Rodeo Lagoon, MRN	WL
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### MacGillivray's Warbler

4/11	Gazos Cr, SM	DVP, MaB
4/15	Pescadero Cr, SM	GH
4/18	Pomponio Cr Rd, SM	AE
4/18–20	Glen Cyn Park, SF	DA, MB, BF
4/21	Grant Ranch CP, SCL	MRo
4/22	Inverness Ridge, PRNS, MRN	JC
4/24	Smith Cr, ALA	MM, DB, PB
4/25	Patterson Pass Rd, ALA	MaM
4/26	Año Nuevo SP, SM	GH
4/26	Bear Valley Rd, MRN	RS

### Yellow-breasted Chat

4/24	Gilroy Water Treatment Plant, SCL	BRe, FV
4/24	Sierra & Felter Rd, SCL	DB, PB
4/25	Del Valle RP, ALA	SH
4/25	Livermore, ALA	NC
4/25	Mitchell Cyn, Mt. Diablo SP, CC	RS
4/29	Llagas Cr, SCL	MP

**Abbreviations for Observers:** DA, David Armstrong; BB, Bill Bousman, BaB, Barbara Brandriff, BoB, Bob Brandriff, DB, Dennis Braddy; KB, Ken Burton; MB, Michelle Brodie; MaB, Matt Brady; PB, Patricia Braddy; AC, Arlyn Chnstopherson; FC, Fred Chambers; HC, Hugh Cotter; JC, Josiah Clark; LC, Les Chibana; NC, Nathan Crawford; RC, Rich Cimino; ADM, Al DeMartini; GD, Gary Deghi; JD, Jim Danzenbaker; MD, Matthew Dodder; AE, Al Eisner; MWE, Mark Eaton; BF, Brian Fitch; MF, Mike Feighner; RF, Rich Fernick; RFi, RF; SG, Steve Glover; ASH, Alan Hopkins; GH, Garth Harwood; HH, Hugh Harvey; KH, Keith Hansen; LH, Lisa Hug; SH, Steve Huckabone; AJ, Alvaro Jaramillo; CL, Cindy Lieurance; CDL, Calvin Lou; DL, Don Lewis; JL, John Luther; KL, Kay Loughman; LL, Les Lieurance; RL, Robin Leong; RLe, Rick Lebaudour; WL, William Legge; BEM, Bruce Mast; DM, Dan Murphy; JM, Joe Moran; JM, Lisa Myers; TMC, Tom McCuller; KMK, Kevin McKereghan; MM, Mike Mammoser; MaM, Mark Miller; PM, Peter Metropulos; RM, Roger Muskat; KO, Kris Olson; BP, Bob Power; CP, Courtenay Peddle; JP, John Poole; JaP, Janna Pauser; MP, Mark Paxton; PP, Peter Pyle; RP, Rich Page; BR, Bob Richmond; Bre, BRe; JR, Jean Richmond; MR, Mark Rauzon; MRo, Mike Rogers; SR, Sidd Ramachandramurthi; DS, David Suddjian; DSi, Dan Singer; ES, Emilie Strauss; ESe, Emily Serkin; NS, Nancy Smith; PS, Paul Saraceni; RS, Rich Stallcup; RSc, Rusty Scalf; VS, Vaner Shuman; RST, Ron Thorn; MU, Myra Ulvang; DVP, David Vander Pluym; FV, Frank Vanslager; AV, Ann Verdi; DV, Debbie Viess; AW, Alan Wight; AWi, Adam Winer; DW, Denise Wight; DWe, Dave Weber; DWi, Dave Wimpfheimer; GW, Grant Webb; JW, Jeff Wall; JWh, Jim White; NW, Nick Whelan; JY, James Yurchenco; MZ, Matt Zlatunich.

Semicolons separate original observer(s) from subsequent observer(s). Abbreviation "mob" = many observers, "mob" = other observers. Information is compiled from BirdBox transcripts and regional listservs. Small (1994) refers to Arnold Small's *Birds of California: Their Status and Distribution*. The author apologizes for any errors or omissions.

**Abbreviations for Counties and Others:** ALA, Alameda; BBA, Breeding Bird Atlas; CBC, Christmas Bird Count; CC, Contra Costa; CCFS, Coyote Cr Field Station; CP, County Park; Cr, Creek; Cyn, Canyon; GGP, Golden Gate Park; L, Lake; MRN, Mann, MP Mile Post; MTY, Monterey; N., N. NAP, Napa; OSP, Open Space Preserve; Pt, Point; PRNS, Pt Reyes National Seashore; RP, Regional Park; Rd, Road; Res, Reservoir; RS, Regional Shoreline; SB, State Beach; SCL, Santa Clara; SCVAS, Santa Clara Valley Audubon Society; SF, San Francisco; SM, San Mateo; SOL, Solano; SON, Sonoma; SP, State Park; SR, State Reserve; WPCP, Water Pollution Control Plant.

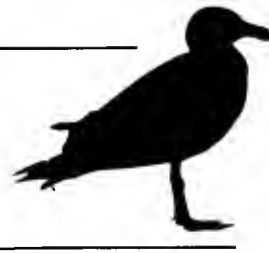
and at Piper Slough, CC, on the 25th (NC).

Observers submitted scattered reports of Tricolored Blackbirds around the region in April. A Yellow-headed Blackbird joined a Red-winged flock at Redwood Shores, SM, on the 13th (RST). In SCL, another Yellow-headed was found along Disk Drive, April 21–23 (MRo, DWe; MM). Three Orchard Orioles continued in GGP, SF, at least

through the 12th (mob). Elsewhere in SJ, an April 1st Orchard Oriole on Broderick Street was no joke (HC). Neither was the Baltimore Oriole, found April 21st in Glen Cyn park, SF (AS). Finally, Lawrence's Goldfinches were reported throughout the month from high country locations ranging from Mt. Diablo SP, CC, to Joseph Grant CP, SCL (mob).

# BACKYARD BIRDER

Meg Pauletich



**M**eg! One of those darned pigeons nearly 'bombed' me when I went to get the paper! Can we get them to feed somewhere else?" I would guess that this is a familiar lament heard by fellow bird enthusiasts 'round the world.

When I first began doing the Audubon Christmas Count 30-some years ago, the sight of a flock of Band-tailed Pigeons was greeted with glee. In the Pacific states, the Band-tailed Pigeons were hunted almost to extinction but have recovered with protection. Some birds migrate to Mexico and Central America where they are easy prey for hunters.

Band-tailed Pigeons are the closest relatives of the Passenger Pigeon, which thrilled early explorers with its huge numbers. Some flocks were estimated at 2 billion!

Professional hunters decimated them to provide food in the cities, and they were declared extinct in 1914. They remain a symbol of the natural riches of the New World.

Pigeons and doves belong to the *Columbidae* family. It includes pigeons as well as the smaller doves of various genera. Cities are populated with Rock Doves, whose colors range from slate blue-gray to mottled browns to white and black. No doubt these evolved as domestic birds escaped from bird fanciers who bred them for specific colors, plumage and characteristics.

For ages, pigeons have been used for racing since they are among the fastest birds on earth. They have also been used as carriers of messages due to their strong sense of direction and homing tendencies. During World War I, several birds were proclaimed heroes. Pigeons apparently orient themselves by using the earth's magnetic field and the position of the sun. Perhaps low-frequency sounds, polarized light and distinctive odors also help them to navigate.

Most birds need to capture a beakful of water, then must tip the head back to swallow. Doves and pigeons are unique. They

can suction water into the esophagus and swallow. This adaptation comes in handy because they require large amounts of water, probably because of their dry diet. Their soft-based bills are perfect for picking up seeds, grains and acorns. They also will eat some insects and grasshoppers and



Rock Pigeon

U.S. Fish and Wildlife Service

are especially fond of fruit. The elderberry crops in our area provide them with a summer feeding frenzy which is accompanied with large "splats" on the driveway—or on people!

The sexes are almost identical, but the female is usually a paler shade. The male puts on quite a show during courtship, strutting his stuff, bowing and puffing up his neck and breast feathers while cooing. You've seen the Rock Doves' flight display on city streets: they flap and clap their wings together while their tail is spread, and their wings are held in a V shape. Mourning Doves, White-winged Doves and Band-tailed Pigeons also have distinctive aerial displays.

When it comes to nest building, this group is pretty pathetic—but successful, since their numbers are stable, if not growing. Their nests are a simple stick platform with a rudimentary lining, at best. You would swear an egg would roll around and off or

just through the twigs. They will nest on the ground, in cacti, bushes or trees, usually 5 to 40 feet above ground—even up to 80 feet. I spied a dove sitting on her nest at my knee level next to an Arizona trail. They will even build atop other species' nests. In 2 to 4 days, the nest is done. Then 1 to 2 eggs are laid and incubation by both parents begins. Usually the male sits on the nest during the day, and the female incubates at nighttime.

It takes about a day for the chicks to peck their way out. Soon the parents feed the chick "milk"—liquid-filled cells that line the crops of both male and females. It is rich in fats and proteins, and the chicks thrive on this diet for 5 to 10 days before beginning to eat regurgitated seeds or fruits. The young leave the nest in 11 to 16 days. Once they master flying, they become a part of flocks which roam quite large distances searching for food.

Band-tails avoid cities and humans, preferring to roam the countryside in small flocks, except when nesting. The large (14.5 inches long) adults are gray with a white band at the end of the tail. Their yellow bill is tipped with black, and it has yellow feet and legs. Rock Doves have pink feet along with a variety of colors. They are strong flyers.

Mourning Doves are 11 to 13 inches long, gray and have long, pointed tails bordered with large white spots. A black spot marks each side of the face. When they burst into flight, their wings make a musical whistling sound. Along with their sad cooing, their sweet appearance makes them a popular, if extremely common bird. Members of this family have the somewhat unique ability to slough tail feathers easily if pounced upon by a predator. Judging by the numbers of feathers on my front patio, the cats next door have been fooled by the Mourning Doves quite often.

As I read more about this family, my appreciation of them grew. How dull city streets would be without the Rock Doves! Beginning birders often learn to identify a Mourning Dove first. And the Band-tailed Pigeons remind us of their extinct cousins, the Passenger Pigeons, as their flocks wheel in our blue skies in search of food. These very large birds amuse me as they try to land on my teensy bird feeders!

# Fall Birding Classes in San Francisco

Evening bird classes taught by Joe Morlan will start Sept. 14, 15 and 16, 2004. All classes meet from 7-9:15 p.m. in room 307, Marina Middle School, 3500 Fillmore at Bay Street. Free parking is in the school lot off Bay Street on the east side of the building.

The instructor may arrange optional field trips on weekends. Bring binoculars and field guides to class if you have them. Fees are \$115 for each 7-week course; \$100 for EA115 and EA120, which are 6 weeks; \$85 for EA125, which is 5 weeks. Pre-registration is strongly advised. For further information call 415.561.1860.

Joe Morlan is co-author of *Birds of San Francisco and the Bay Area* and *Birds of Northern California*. He is also coordinator of the recorded "Northern California Bird Box" sponsored by Golden Gate Audubon. Slides illustrate all lectures, and the text for all classes is *A Field Guide to Birds of North America*, fourth edition, by the National Geographic Society. *The Sibley Guide to Birds* is recommended as adjunct text for Ornithology II & III.

**Field Ornithology I** Introduction to birds and birding, combining basic field skills with the study of bird ecology, biology, evolution and behavior. Tuesdays. Part A (EA101): Sept. 14-Oct. 26. Part B (EA105): Nov. 2-Dec. 14.

**Field Ornithology II** An in-depth study of the identification and status of North American land birds, including sparrows, juncos, longspurs, buntings, and cardinals. Wednesdays. Part A (EA110): Sept. 15-Oct. 27. Part B (EA115): Nov. 3-Dec. 15.

**Field Ornithology III** A continuing study of North American water birds including snipe, phalaropes, skuas, jaegers, and gulls. Thursdays. Part A (EA120): Sept. 16-Oct. 27. Part B (EA125): Nov. 4-Dec. 16.

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# Where to Look for West Nile Virus

**V**ector and mosquito control professionals predict that West Nile Virus may reach the San Francisco Bay Area either this year or next. West Nile Virus' life cycle depends primarily on birds and mosquitoes: mosquitoes pick up the virus by feeding on infected birds and then transmit it when they bite birds, other animals, or humans. Only mosquitoes can spread the virus, and only one percent of people infected with the virus show any symptoms.

The mosquitoes that are most likely to carry West Nile Virus are the several species of the genus *Culex*, especially *Culex pipiens*, the house mosquito. These mosquitoes are fresh water mosquitoes that breed predominantly in human-made structures or containers, such as storm-sewer catch basins, artificial containers, gutters, untended bird baths, old tires and ditches. Mosquitoes need only a few days to hatch once the eggs are laid, so standing water of just a few days' duration can breed mosquitoes. These mos-

quitos are not long-distance travelers and usually travel less than a quarter mile.

Salt marsh mosquitoes also exist in the Bay Area, but these mosquitoes have not been found to be effective carriers of West Nile Virus in natural settings. Furthermore, mosquito populations can be reduced in tidal marshes with good tidal circulation and fish to eat the mosquito larvae. Restoration of tidal marshes can actually help reduce mosquito populations, as fluctuations keep water moving with tides. This limits the presence of standing water in which mosquitoes breed. So fear not tidal wetlands. They remain one of our most precious resources.

## How You Can Help

Here are some ways you can help reduce risks associated with West Nile Virus:

- Don't keep open containers that catch and hold rainwater and remove standing water sources from your backyard. Make sure that gutters, sprinkler systems and

other water sources around your home are not holding standing water.

- Empty and refill your bird baths frequently—at least on a weekly basis.
- Keep your eye out for sources of standing water in your community. Make sure your local water utility keeps your storm and sewer drains dry.
- When outside, take steps to reduce your risk of being bitten: avoid high exposure at dawn and dusk, when mosquitoes are most active, and wear long clothing and mosquito repellent when visiting mosquito-infested areas.
- Help public officials monitor bird deaths by reporting dead birds that appear to have died from disease to 877-WNV-BIRD. Do not handle dead birds without protection.

For more information on West Nile Virus in the Bay Area, visit the San Francisco Bay Joint Venture website at [www.sfbayjv.org/wnv.htm](http://www.sfbayjv.org/wnv.htm) or contact Golden Gate Audubon.

by Arthur Feinstein, Director of Conservation

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